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C7Ag

Agricultural Situation

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Statistical Reporting Service
U.S. Department of Agriculture

Seasonal
Price Dip
For Hogs
Seen Small

Steer
Prices
Show
Promise

Livestock Prices

TIME OF IMPROVEMENT

Reduced
Slaughter
May Aid
Lamb Prices

Improved livestock prices seem likely during the second half of 1967, as reductions occur in the high slaughter rates of January-June. Some early indications were evident in mid-August, with steer prices on the uptrend and lamb prices holding above year-earlier levels.

REVIEW: The first half of 1967 was a period of plentiful meat supplies. Beef production was up 6 percent from the same period of 1966, pork production was up 15 percent, while lamb and mutton production was up 2 percent. Adding in a 16-percent gain for poultry, the total was 21 billion pounds—10 percent over 1966.

Prices reflected this abundance. Prices received by farmers for cattle in the first half of 1967 averaged \$21.91 per 100 pounds—almost 4 percent below a year earlier—while hog prices averaged \$19.22, down 21 percent.

STEERS: Second-half meat supplies more in line with demand will likely spark price recoveries. July–September prices of Choice steers at Chicago could run moderately above the 1966 third-quarter average of \$25.79 per 100 pounds, with October–December prices also above a year earlier.

HOGS: At the beginning of August, hog prices were more than \$3 below the 1966 summer peak of \$25.75 for gilts and barrows. However, by the end of the year, smaller slaughter is expected to moderate the seasonal price decline to a little above the October–December 1966 average of \$20.37.

LAMBS: In late July, Choice slaughter lambs at San Angelo averaged \$23.50 per 100 pounds, more than \$3 below the seasonal peak in May, but \$3 above the year-earlier level. Lamb prices the rest of the year should benefit from a smaller slaughter.

The 6-percent smaller lamb crop this year should help tighten supplies.

Of course, further improvement in grass conditions could change things. A bulge in marketings resulting from heavy movement of lambs directly off grass to slaughter could affect the marketing pattern later this year and in early 1968.

INVENTORY: The new year is expected to bring somewhat smaller livestock numbers than were present at the beginning of 1967.

The cattle inventory (including dairy stock) will probably decline for the third consecutive year. This would not primarily reflect slaughter rates, but a 1 percent smaller calf crop this year, fewer imports of feeder cattle, and a continued drop in dairy cow numbers.

In the first half of the year, total cattle and calf slaughter was slightly below the level of 1966. In the second half, cattle slaughter will likely be at or below the earlier level, while calf slaughter will probably continue substantially below last year. Most of the inventory decline will be in dairy herds; the June 1967 number of milk cows was down 4 percent from the 14.1 million head the year before.

FARROWINGS: A short-term reduction in hog numbers has been shaping up this year, due to a downturn in farrowings. On June 1, hog producers said they planned 3 percent fewer farrowings during June–November than during the same period of 1966. Thus, hog slaughter during the first

half of 1968 could average moderately below year-earlier levels.

But this reduction, which began with a March downturn in farrowings, doesn't appear to be the beginning of any substantial downswing in the production cycle. It's hard to slack off with a lot of feed around. The August 1 Crop Report estimated a 13 percent larger corn crop this year, and an 11-percent gain in feed grains.

SHEEP: Fewer sheep and lambs on farms next January 1 would mark the 8th year of inventory decline. Second-half 1967 slaughter rates will likely slow, but not enough to offset the 2-percent rise in January–June slaughter over 1966.

WEIGHTS: Livestock producers have been trimming the weights on marketed animals this year. Heavy discounts on the higher-weight cattle, hogs, and lambs last winter have discouraged excessive weights.

Marketing weights of steers at 7 markets during January–June averaged 16 pounds above year-earlier levels. However, the increase narrowed during the period, with June weights only 6 pounds above. Slaughter weights for hogs averaged 4 pounds lighter than a year ago this spring, and were expected to stay down for the summer.

The price spread between medium and heavy ranges for both hogs and sheep has narrowed since early this year.

R. L. Rizek
*Economic Research
Service*

Test Your Memory of 1966

To Judge 1967 Events Better

T F

1. ☐ ☐ 1966 was a record crop year.
2. ☐ ☐ But livestock output was down.
(Both statements are false. Check the article beginning on the next page.)
3. Farmers bought (5, 10, 15) percent more production materials than in the previous year.
4. Farm output per man-hour rose (4, 9, 13) percent.
5. Each farm worker produced enough food for (30, 35, 40) persons.

(Read the story on page 5 about the 5-percent rise in purchased inputs, the 4-percent gain in output per man-hour, and the 40 persons each farmer averaged feeding.)

6. Net farm income reached \$4,955 per farm. This 10-percent rise above 1965 all came from gains in gross income, right?
7. Total farm expenses also leaped, by 8 percent, with labor outlays mainly to blame, right?

(Reasons are wrong. Page 6 notes how a drop in farm numbers aided the income gain, and points out sharply increased payouts for feed and replacement livestock.)

T F

8. ☐ ☐ Farm exports in the past trade year set a record high for the fourth straight time.
9. ☐ ☐ Gains in the past year, as usual, were mostly in food commodity shipments.

(True for records, false for reason behind the gain. Story on page 8 tells all.)

RATE YOURSELF

1-3 right—Farm chores have got you down.

Relax and read more.

4-7 right—You're well versed on farm matters; congratulations.

8-9 right—Turn in your hammock; you're obviously over-read, under-worked.

NOW CHECK THE FACTS ON 1966 . . .

FACTS/66:

Sag in Crops Trimmed Farm Output a Bit

Farm output in 1966 shaped up as the second best on record. U.S. farms came within 2 percent of achieving the peak volume of 1965. This was the first slowdown since 1957, when the volume of production slipped by a similar percentage.

Production of all crops grown in the past year declined by 3 percent, while the volume of all livestock and livestock products rose by 3 percent.

This contrasts with 1965, when crop production surged, and the output of livestock and livestock products decreased. You'll remember that large changes occurred—plus and minus—in 1965 for the volume of most crops. Out of a dozen crop and livestock categories, all but 4 changed by over 3 percent. This activity included strong setbacks for sugar crops and tobacco and sizable advances in the output of feed grains and oil crops.

Such wide swings were less in evidence last year. Rather, the gains of 1965 were maintained, with production of most crops remaining near previous-year levels. Only five categories exhibited changes of over 3 percent during 1966.

Among the 12 commodity categories, the largest change—a decline of 36 percent—was recorded for cotton output. Acreage planted to cotton was over one-fourth lower than in 1965, largely due to increased acreage diversion under Government programs. Adverse weather during the growing season kept production to 9.6 million bales, the lowest level since 1946.

Smaller decreases occurred for dairy products, down 3 percent, and hay and forage crops, down by 2 percent.

A few commodities made notable gains in 1966. There was an increase of 8 percent for the already bumper oil crops, and an increase of 11 percent for fruit and nut crops, along with smaller gains for several categories of livestock and related products.

Record levels of soybean and peanut production were responsible for the greater output of oil crops, while the large fruit and nut output resulted mainly from a sizable citrus harvest. Production of oranges, grapefruit, and lemons was over a fourth larger than in 1965, and 55 percent over the 1960-64 average.

Record quantities of broilers, turkeys, and eggs enlarged the volume of poultry and eggs produced by 6 percent. Recovering from a slight year-earlier setback, meat production rose nearly 5 percent in 1966, and was highlighted by a 6-percent gain in the output of hogs.

Farm output: In 7 out of 10 regions last year, the output trends of 1965 were reversed. Output was steady or increased for four regions. The Northern Plains States and the Pacific States achieved records in volume last year. The Lake States registered a small increase, and the Southeast equaled its 1965 record.

A 9-percent decrease in production for the Southern Plains marked the largest downward change among the six remaining regions. The Northeast, with a decline of 5 percent, slipped to the lowest level since 1957.

Cropland used for crops: The Southern Plains registered the only notable change in cropland, a decrease of 2.2 million acres. The total acreage for the Nation, 332 million, was the second lowest of record.

Crop production per acre: The Lake States, with a 7-percent increase, and the Southeast enjoyed record levels, while 12-percent declines were recorded for the Delta States and Southern Plains. Production in the Delta States was the lowest since 1960.

Farm labor: This input decreased in 9 of the 10 regions, with declines ranging from 3 percent in the Southeast to over 11 percent in the Southern Plains. Man-hours required for farmwork were higher in the Pacific region, due chiefly to greater production of fruits and nuts.

Farm output per man-hour: In the Lake States and Northern Plains, this measure rose more than 8 percent in 1966, while the increase was less than 1 percent in the Appalachian and Pacific areas.

FACTS/66:

After a Long-Term Rise in Our Farms' Efficiency, A Brief Pause

A lot is written and spoken about progress in farming methods. The question arises as to just how effective the improved methods are and what they all add up to.

Last year's farm output information gives a concrete answer to this question, providing a roundup report for all agricultural commodities based on their changes from earlier years.

On all counts, U.S. farm production has shown solid growth. More was produced in 1966 more efficiently and on less land than only a decade ago.

An important indication of this growth is the volume of farm output. The output of all U.S. farms in 1966 was substantially higher than the level of 8 or 10 years ago; it was 13 percent above the 1957-59 average and only slightly below the record year of 1965. To get this 13-percent rise over 1957-59, farmers required only a 5 percent larger volume of inputs than in the prior period.

The key to this success has been the replacement of less productive means of farming by more productive ones. The crop-production diet, you might say, has been enriched with more purchased materials—fertilizers, livestock, feed, and seed—while farm inputs such as labor have continued to decrease.

MORE BOUGHT GOODS

This trend to more nonfarm raw materials was reflected last year in a 2-percent increase over 1965 in the total volume of inputs. Total purchased inputs (especially fertilizers and liming materials) increased by 5 percent, while nonpurchased inputs decreased by an equal percentage.

The benefit to farmers for modernizing and increasing the volume of their inputs was more output per man-hour last year.

However, since total farm output decreased somewhat, while inputs rose, the inputs were less productive than those of a year earlier. While remaining 8 percent above 1957-59, productivity of input per unit of output was 4 percent lower than in 1965.

Farm labor has declined as an input, as motors and engines have increasingly joined the farm operator, and as farm hands find more work off the farm.

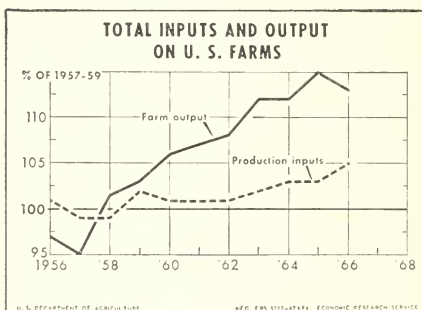
LABOR EXODUS

Last year, for example, labor used on U.S. farms totaled about 7.5 billion man-hours, lower than for any previous year and 5 percent less than in 1965. Of the 1966 total, nearly half was devoted to crop time, about 40 percent to livestock, and the remaining hours to overhead jobs.

The decrease of more than 400 million in man-hours spent on the farm caused farm output per man-hour to rise by 4 percent in 1966. Chiefly because of a decline in production, this measure of human productivity rose somewhat less than it had a year earlier. Nevertheless, farm output per man-hour was 87 percent greater than it was a decade ago, proof of the change which better technology has worked on the farm.

In one real sense, what our modern farm enterprise added up to last year was food for more people. An increased domestic population and millions abroad consumed the near-record crop. Each farm worker produced enough food for 40 of these persons, or 2.5 more than he fed the year before.

Economic Research Service



Those Magnificent Men: Their farming machines help them keep the input-output gap wide—reflecting efficiency of U.S. agriculture.

FACTS/66:

Many Types of Farms Earned More Money

While the crops were growing, you felt the pinch of higher expenses. But when all returns were in, 1966 was a good year, and maybe your lot improved.

True for all? No, but likely for many farm operators, as both farm expenses and farm receipts spiraled upward.

Like farm output last year, net farm income was the second largest of record, totaling \$16.1 billion. This averaged out to \$4,955 per farm, 10 percent higher than in 1965. (A decline in farm numbers accounted for 4 percent of this increase.)

Average expenses per farm rose too, reaching \$10,214. Although labor outlays remained near the year-earlier level, wage rates were up, along with fertilizer outlays, equipment costs, and overhead expenses. Feed and livestock replacement expenses rose substantially, together accounting for nearly half of the 8 percent enlargement in total farm expenses.

But farmers' receipts more than kept pace with the bills, as farmers received more gross income from all sources. Livestock receipts were 13 percent larger, crop receipts 5 percent, and Government payments increased \$1 for each \$2 paid to farmers in 1965. As a result, total gross farm income rose by 10 percent.

Profits were mixed or improved for many types of farm operations, reflecting both the higher costs and the larger gross incomes. Cotton farms were typical of this mixed situation: Out of 10 types of representative cotton farms, 5 fared better last year, while 5 were worse off than in 1965.

Participation in the 1966 cotton program led both to a smaller harvest per farm and to higher Government payments. Yields were down, too, averaging lower on eight types of operations. Both production and prices received were lower in four cases.

Lower expenses were important in boosting net returns on cotton farms

in the Delta and irrigated cotton farms in the High Plains.

By contrast, lower expenses on the cotton-peanut farms only reflected the smaller cotton acreages.

Corn Belt farms also had a mixed year in 1966. Incomes ranged widely by type of operation, from an 8-percent downturn for hog-beef fattening farms to a gain of one-third for hog-dairy farms. On all except the hog-beef fattening farms, however, gains in production and prices received more than made up for higher expenses.

The returns for broiler operations varied up and down the Atlantic Coast last year. Returns were up the most in Georgia, where farmers enjoyed an increase of 13 percent in the contract payment rate. Production suffered on Delmarva broiler-crop farms, bringing incomes down by one-fourth.

Changes from 1965 in net incomes on sheep ranches were also mixed, ranging from a decline of 10 percent in the Northern Plains to an increase of 26 percent in the Southwest.

The overall profit picture was better for dairy, tobacco, cattle, and wheat farms. All were gainers last year.

For dairy farmers, a bigger margin of profit resulted from more favorable prices and a production-per-cow up-trend, despite higher prices paid for feed, livestock, and other expenses.

Improved tobacco prices, 7-11 percent higher than in 1965, were the key to greater net farm incomes on tobacco farms. And production was up on four of seven types surveyed.

Western cattle ranchers were able to equal or better their 1965 incomes last year. Prices received were higher in all areas, but net ranch production was uneven—declining in the Northern Plains and Intermountain Regions, and holding steady in the Southwest. At year's end, net incomes ranged from about the same as in 1965 on Northern Plains ranches to nearly one-fifth higher in the Southwest.

Production and prices received went opposite ways on most types of wheat farms. Wheat-fallow farms in the Pacific Northwest were the strong exception to a declining production situation. Better prices on six of the seven wheat-farm categories contributed to net incomes from 5 to 56 percent higher than in 1965.

FACTS/66:

The wheat crop boom is resounding from elevator walls this year, with an expected record turnout of 1.5 billion bushels and the smallest carryover in 15 years.

And, although nothing is correspondingly boomy about wheat prices recently, net wheat incomes during the past decade have shown some sharp improvements.

A study by the Economic Research Service of several types of wheat-producing farms in the Pacific Northwest and Northern and Southern Plains points out the income trend.

For example, consider the average costs and returns in 1966 for medium-sized wheat-fallow and wheat-pea farms in the Northwest in comparison with averages for 1957-59.

Net incomes on the wheat-fallow farms last year averaged \$22,000, an increase of 40 percent over 1957-59. Wheat-pea operators enjoyed incomes averaging \$23,500, 74 percent larger than in the earlier years. Differences in locality, size, and other crops help to explain the income differences.

The wheat-fallow area consists of five Washington counties in the big bend of the Columbia River, and parts of five Oregon counties adjacent to the Columbia. Nearly all cropland is used for grain, mostly wheat; and most cropland is in a 2-year rotation—grain one year and summer fallow the next. In 1966, the average farm size was estimated at 1,520 acres, 200 acres larger than a decade ago.

Size of the wheat-pea farms has been increasing for many years. In 1950, these farms averaged 482 acres. By last year, they were 28 percent larger, or 615 acres. The farms, located in Washington and Idaho, rotate wheat crops with dry-edible peas, lentils, summer fallow, and green manure (considered a form of summer fallow by local operators).

Let's look at financial returns on both types of farms.

Many sources of cash appear on the credit side of the farm ledgers: crops, livestock and related products, Government programs, and miscellaneous returns. Since 1957-59, annual income from all sources on the wheat-fallow

Northwest Wheat Farms—A Study Of Income Trends

farms has risen by 34 percent to \$34,100 last year. A gross income of \$37,500 on the wheat-pea farms represents a 58-percent improvement over the comparison years.

Larger wheat crops have resulted from larger plantings on the wheat-fallow and better yields on the wheat-pea farms. Although the average wheat acreage harvested has increased by 80 acres to 390 since 1957-59 on wheat-fallow farms, their yields have remained near a level of 33 bushels per acre. By contrast, yields on wheat-pea farms have increased from 47 bushels per acre in 1957-59 to 60 or more in recent years, while acreage harvested has risen by 20 to 190 acres. Much of the increase in wheat yields has been attributed to better varieties and to high rainfall, allowing more efficient use of greater amounts of fertilizers.

The dollar value of wheat crops for both localities has risen, but not in proportion to the improvement in gross incomes. On the wheat-fallow farms, the increase in dollar value was from about \$18,000 in 1957-59 to \$20,000 last year, but these sales declined from 71 to 58 percent as a share of gross income. Wheat sales on the wheat-pea farms, \$13,300 for 1957-59 and \$16,400 for last year, represented about 60 and 45 percent of the gross incomes.

Accounting for these declining shares of income from wheat was the shift in Government programs from support prices to direct payments. In 1957-59, Government payments per farm were measured in hundreds of dollars and averaged 2 percent or less of gross incomes. In 1966, they amounted to \$6,500 or 19 percent of the gross income for wheat-fallow farms, and \$4,700 or 12 percent on wheat-pea farms.

Looking now at the debit side of the ledgers, farm expenses of about \$12,000 on wheat-fallow farms in 1966 were up one-fourth from the earlier years. One cost reduction came from a decrease of nearly 40 percent in the man-hours of labor used.

Farm expenses of \$14,000 last year for wheat-pea farms were 37 percent higher than in 1957-59.

FACTS/66:

Agricultural Exports Set Another High

The trade year 1966-67 was the best ever for the sale of our farm products abroad. Valued at \$6.77 billion in the year ended June 30, these exports accounted for half of the U.S. favorable balance of trade.

Not that records are unusual for our farm exports: each of the past 4 trade years has set a new high in value.

Interestingly, sharp gains recorded for nonfood commodities bely that frequent symbol for our outbound commodities, a mammoth freighter being loaded with grain. All types of farm products enjoy large foreign sales, but nonfood commodities played a big part in setting new records last year.

Unmanufactured tobacco. Exports of \$550 million in 1966-67 were up 39 percent from the previous trade year. Behind the increase were a high-quality U.S. flue-cured crop, more foreign demand, and U.N. sanctions against imports of Rhodesian tobacco by member nations.

Cotton (excluding linters). Record-high demand in free world nations gave a 41-percent boost to cotton shipments valued at \$542 million. The largest markets were Japan, Taiwan, and the Republic of Korea in the Orient, and Italy and Canada in the West.

Oilseeds and products. Exports of soybeans, up 4 percent to \$767 million, contributed heavily to the total export value of \$1.25 billion for all oilseeds and products. Protein meal exports rose 9 percent, while cottonseed and soybean oils showed a total decline of 18 percent.

These commodities admittedly didn't command the volume of such food products as grains. To get an amount equal to the \$2.9 billion receipts for exported grains and preparations, you'd have to total up the export value of the three nonfood categories mentioned above, adding the worth for exported animal skins, hides, fats, and oils.

However, for the grains, improve-

ments in two categories and declines in two others led to a 6 percent slowdown in the value for 1966-67.

The biggest earners, feed grains (excluding products) and wheat and flour, earned a little less last year. A smaller volume of corn exports, and substantial drops for barley and oats, held feed grain exports to \$1.15 billion—14 percent below a year earlier.

Wheat and flour exports of \$1.3 billion were down 6 percent from 1965-66. Smaller wheat exports were mainly behind the decline, with reduced shipments to Western Europe, Yugoslavia, Turkey, and India.

Bigger rice shipments helped offset the slowdown in wheat going to India. Rice also made news in Vietnam: Shipments from the United States rose 138 percent over 1965-66. Also, total rice exports of \$309 million were up nearly two-fifths.

Exports of other types of grains and preparations increased 14 percent, contributing \$97 million of the receipts for all grain exports.

The value of U.S. fruit exports wilted slightly in the last trade year, declining to \$20 million. Bigger foreign supplies of fresh fruits provided stiff competition. Notable examples were the record apple and pear crops of Italy, and a citrus abundance from the groves of Australia, South Africa, and Brazil. A downturn in canned fruit prices offset a higher volume of these exports.

Vegetable shipments perked up, rising slightly to \$172 million. Big gains for dried peas and beans more than made up for smaller exports of canned and fresh vegetables.

The holds of outbound ships last year carried 22 percent more pork and 12 percent more variety meats, but less veal, beef, and poultry.

American poultry encountered stiff competition from surpluses in Western Europe, and so declined by 16 percent last year.

A more serious falling-off occurred in the exports of dairy products. Shipments valued at \$122 million were 30 percent below 1965-66. The volume of nonfat dry milk exported fell by nearly a half, while exports of butter slowed to a trickle. Sharply reduced supplies of U.S. dairy products in July-December 1966 caused the smaller outflow.

Economic Research Service

MOST FARM EXPORTS ATTRIBUTED TO COMMERCIAL TRADE

U.S. agricultural commodity aid to other countries, valued at over \$1 billion yearly, is probably the type of farm product shipment people are most aware of.

But most of the value of our farm exports comes from the trading of private U.S. companies. In the trade year ended June 30, 1967, for example, commercial sales for dollars amounted to \$5.3 billion—four-fifths of the \$6.8 billion commodity export total.

Going back to 1957, the share handled by private exporters—and private charities exporting food—was smaller, amounting to 59 percent of the \$4.7 billion total for that year.

Most of the increased exports since then have been due to the private sector, since public commodity aid to other nations has remained close to the \$1.5 billion yearly level.

Most of the grain exports, a major component of agricultural aid exports, were handled privately in the year just ended. Commercial wheat and flour exports were valued at an estimated \$670 million, compared with Government program exports of \$642 million. Commercial rice exports of \$172 million were over 26 percent larger than the value of shipments under Government-financed programs.

Economic Research Service

EEC BIG MARKET FOR FEED GRAINS

The European Common Market has proved to be an uncommon one for feed grains. In 1965-66, one-third of our \$1.5 billion in commodity exports to the EEC were feed grains. This lucrative trade slowed down somewhat in 1966-67, but the long-range projection for increased EEC consumption is excellent.

In the 1965 crop year, for example, EEC coarse grain production fell short—by about 10 million metric tons—of consumption. Yet, based on

current trends, Market members will need nearly 50 percent more feed grain by 1975, an amount that may not be fully met by bigger output of their own.

While the picture is cloudy for a short-term EEC grain abundance, it's clear that the housewife's demand for red meat and poultry, and the farmer's desire for grain-intensive rations are strong.

The EEC population is due to reach 200 million by 1975. Meat consumption in that year is projected at 16.6 million tons, compared with the current 10-million ton appetite.

At present, EEC livestock practices speak more of the past than of this promising future. For example, beef and dairy cattle are frequently raised as a single herd, and livestock are usually raised on small multipurpose farms.

But modern livestock methods, which depend in good measure on a grain ration, are fast appearing. Techniques in a rapidly expanding segment of the broiler industry compare favorably with our own. In some areas of France and Germany, hogs are raised entirely on roughage and root crops, while in other regions of these two Common Market countries, a ration relying heavily on grain is used.

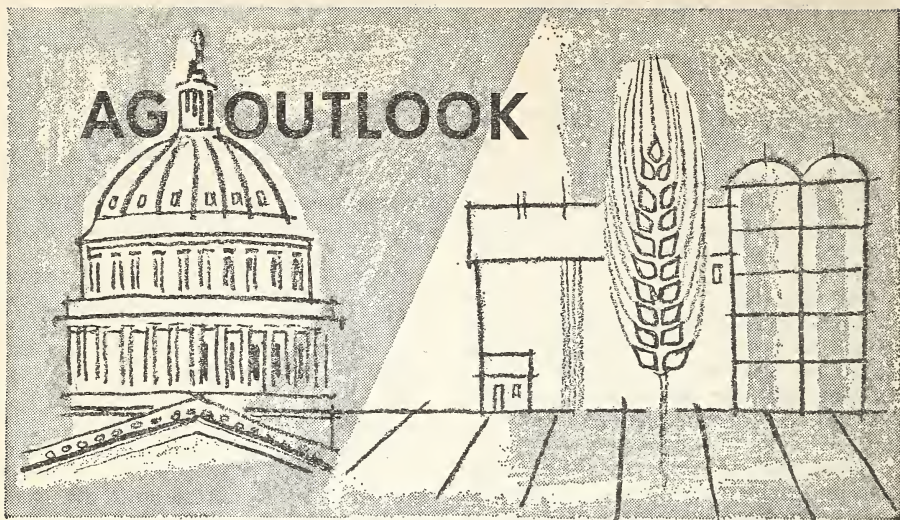
*Donald Regier
Economic Research Service*

EXPORT ACREAGE

The yield from three acres in four last year went into our own food basket. But the yield of that fourth one was destined for foreign consumption.

This high share of U.S. acreage being used for export production is the result of two trends. First, our exports have been rising steadily in volume, and second, harvested acreage has been declining in recent years.

Thus, in 1955-60, between 44 and 64 million acres annually were required to produce goods for world markets, as against a total harvested acreage which averaged 324 million acres. Since 1961, acreage producing for export has varied between 66 and 76 million, while the total has declined to about the 300-million acre level.



Based on Information Available September 1, 1967

OFFSETTING DAIRY CONDITIONS

The stronger livestock market and prospects for improved off-farm opportunities favor an above-average decline in dairy cow numbers. On the other hand, 1967 milk prices likely will average the highest for any year on record. Moreover, prospective lower feed prices indicate milk-feed price ratios this fall and winter near year earlier record levels. Prospective hay and forage supplies appear ample, although the quality of forage has been reported below normal. On balance therefore, milk production for all of 1967 likely will total slightly under the 120.2 billion pounds of last year.

LESS MILK OUTPUT

January-July milk output was slightly below the year-earlier pace. Also, August-December output likely will continue the pattern, and total 1967 production may be slightly under the 120.2 billion pounds of 1966.

LESS NONCITRUS FRUIT

Supplies of fresh market deciduous fruit during late summer and fall, although seasonally heavy, are expected to be considerably smaller than in this period of 1966. Prices for 1967-crop deciduous fruits for processing are also likely to average well above the levels of last season. As of August 1, total production of deciduous fruits was expected to be 11 percent below 1966. All major deciduous crops are smaller than both last year and average, except prunes and plums. The apple crop is slightly smaller than in 1966, the peach and grape crops are substantially lighter, and pears will be down sharply.

Trucks Lead in Fresh Fruit Shipments

Take several dozen varieties of fresh fruit and juggle them continuously throughout the year. On a much larger scale, this is the task of shippers who supply fresh fruit in abundance to metropolitan markets.

The fruit of large-scale marketing—at 41 metropolitan areas recently studied—is the volume equivalent of 20,000 to 25,000 carlots of all varieties, which arrive monthly in and out of season. During 1964-66, in fact, the traditional slow months for plentiful noncitrus fruit supplies were reversed, with mid-winter December edging out March and June as the peak shipment period.

The secret of a large, constant fruit volume around the entire United States is a network of truck, rail, air, and sea transport for quick delivery. Combined with modern storage facilities, it allows marketers to coordinate the supplies of citrus and noncitrus fruits.

Accounting for 30 percent of all fresh fruit marketed in 41 major cities, citrus fruits fill the slack in deciduous fruit shipments during the winter.

Beginning in mid-September, when noncitrus marketings to these cities are past their peak, the citrus tide rolls in. During 1964-66, the December peak averaged 11,000 carlots. The tide begins to ebb in mid-March. In the 1964-66 period, for example, it slowed to less than 3,500 carlots monthly during July-September.

The citrus cycle harmonizes well with the harvest of noncitrus fruits. From June through November, noncitrus fresh fruits are plentiful. Noncitrus marketings reached 21,000 carlots in these peak months of 1964-66, with the monthly volume after November averaging between 12,000 and 15,000 carlots.

An interesting aspect of the non-citrus fruit-marketing cycle is the year-round steady volume of bananas marketed. Amounting to a whopping 30 percent of noncitrus fresh fruit shipments, bananas appear on our shores and shelves at a steady rate of between 5,000 and 7,000 carlots monthly.

In the overall shipment picture the banana boat, and the boxcar too, have had increasing competition from the truck. An earlier study of fresh fruit unloads at 19 markets in 1955, for ex-

ample, indicated that 61 percent were shipped by boat, rail, and air, rather than by truck. In the recent study, however, trucks took over first place, with 55 percent of all unloads.

The proportion of noncitrus fruits carried on trucks was even higher: two-thirds of all noncitrus fruits were unloaded from the vehicles. Most markets relied heavily on truckers for apples, peaches, and strawberries grown in nearby States.

Although a smaller proportion of all citrus shipments arrive at the market by truck, much of the short-haul business goes that way. Thus, much of the California orange crop moves via trucks to nearby western markets.

Rail, boat, and air shipments are vital over long hauls, especially in carrying the West Coast crops of fruit across the U.S. Most of the western orange crop bound for Atlantic Coast cities, for example, moves by rail.

Ben Huang
Economic Research Service

HIGHER RAIL RATES

Rail freight rates for agricultural products have averaged lower each year since 1958. But this may be the last chance to make such a statement.

The cost of shipping farm food products by both truck and rail in 1964 was \$5.1 billion, or 10 percent of the total bill for marketing domestic farm-originated foods in the United States. This was slightly less than in 1957-59.

Increased rail rates, however, were recently authorized. The railroads felt they weren't getting enough revenue from shipping, and the Interstate Commerce Commission agreed. So on August 1, the authorities okayed a general rate increase, not to exceed 3 cents per 100 pounds shipped.

Higher rates were authorized to begin shortly after the decision. But final approval of specific rates by the ICC will depend on investigations and hearings to begin early in October. Railroads must make adjustments to customers who have started paying the new rates if increases are not finally approved.

How the Cost-Price Squeeze Affects the Farmer's Net Return

These figures might seem rather abstract to some people:

Prices Paid and Received by Farmers (1910-14=100)

Year	Paid ¹	Received
1950	256	258
1955	276	232
1960	300	238
1965	321	248
1967:		
May	342	252
June	343	255
July	345	257

¹ Includes interest, taxes, and wage rates.

But to the farmer, these numbers indicate the changeability of his prices and expenses.

Prices of the goods and services used in farm production have increased every year but two since 1950.

Production expenses now take more than \$2 out of every \$3 of gross farm income. For example, a farmer ends up a year's operation with the following:

Gross income.....	\$15,000
Production expenses.....	10,000

Net income..... \$5,000

The next year the prices he receives for products sold drop 2 percent while prices of production items increase the same percentage. Assuming no change in the quantities sold and bought, his income would be:

Gross income_	\$14,700 (-2 pct.)
Production costs ----	10,200 (+2 pct.)

Net income_ \$4,500 (-10 pct.)

When production expenses are going up, a price increase raises net income less than a price decrease of the same size reduces it. Using the above example, except that prices received are assumed to increase 2 percent, net income would be:

Gross income_	\$15,300 (+2 pct.)
Production costs ----	10,200 (+2 pct.)
Net income_	\$5,100 (+2 pct.)

Costs of Producing Cotton: They Vary Between Years

Year in and year out, the standard bale of cotton has weighed 500 pounds. But the farmer's total cost of producing it has tended to seesaw.

One recent example is the change in cotton costs between 1964 and 1965. According to surveys of cotton producers in all major upland-producing areas, the cost per bale of lint averaged \$142.20 in 1964, compared with \$136.45, or \$5.75 less, in the next year.

The average cost per pound of lint, not counting the cost of associated cottonseed, dropped from 28.5 cents in 1964 to 27.3 cents in 1965. The lower cost mainly resulted from better yields: 576 pounds per acre in 1965, compared with 540 the preceding year.

Then too, the cost decline reflected a trend to some dollar-reducing production improvements. For example, over one-half of the 1964 crop in the Southeastern upland-growing areas was harvested by hand. But the next year, this method accounted for only a little over one-third of the crop. And 15 percent

UPLAND COTTON COSTS PER BALE

Item	Average cost per bale	
	1964	1965
Labor.....	\$37.67	\$31.06
Power and equipment.....	30.25	31.23
Materials:		
Seed.....	2.90	2.73
Fertilizer.....	10.18	9.83
Herbicides.....	1.41	2.12
Insecticides and fungicides.....	5.07	5.17
Defoliants.....	.89	.85
Other chemicals.....	.27	.32
Total materials.....	20.72	21.03
Ginning, bagging, and ties.....	17.01	18.03
Custom services.....	6.89	8.53
Irrigation.....	7.45	7.33
Interest on operating capital.....	2.21	2.17
Total direct costs.....	122.20	119.38
Land.....	21.76	21.49
General overhead.....	16.66	14.71
Total cost per bale of lint and associated seed.....	160.62	155.58
Value seed per bale.....	18.42	19.13
Cost per bale of lint.....	142.20	136.45
Total cost per pound of lint.....	.284	.273

of the total U.S. cotton crop was picked by hand in 1965.

Average labor expenses during the 2 years reflected the increased mechanization. Totalling \$42 per acre harvested in 1964, the labor bill averaged \$37 for all areas in 1965.

The cost per harvested acre of most other inputs went up during the period. Some of these increases went hand in hand with more efficient methods of cotton production. Such items in the survey included:

Power and equipment. Costs rose by \$3 per acre harvested to \$37 in 1965.

Herbicide materials. These costs averaged \$2.55 per acre in 1965, up 60 percent from a year earlier. An estimated 39 percent of the 1965 crop was treated with preemergence herbicides.

Postemergence applications were made on about 18 percent of the acreage.

Fertilizers. Costs averaged \$11.79 per acre in 1965, about 3 percent higher than the 1964 level. Nitrogen applications averaged 72 pounds per acre planted, 11 percent more than in the preceding year, with about 82 percent of the acreage receiving commercial fertilizer applications.

Costs per pound of lint for much of the 1965 crop ranged between 21 and 32 cents. Outside these limits, one-fifth of the crop cost under 21 cents per pound to produce, while another fifth cost growers over 32 cents.

I. R. Starbird

B. L. French

Economic Research Service

LIFE ON FARMS GETS NICER DESPITE THE COSTS

How well off are the farm folks in your county? To get a good idea, you might interview them all as to their yearly sales, property values, and the number of cars, homefreezers, and telephones they possess. That's about what USDA economists did when they set out to create a yardstick for measuring rural well-being.

They call it the level-of-living index, and it provides an interesting picture of life on U.S. farms. While it's true that the index of farm operators and their families for all counties in the U.S. rose 22 points between 1959 and 1964, this gain wasn't equally shared by all areas.

Take the South, for example: The level-of-living advanced by one-third during the period, twice the rate of the other regions. Even so, the 1964 index of 108 (average of U.S. counties in 1959 equals 100) for the Southern States lagged behind the United States figure of 122 and the Western level of 145.

A look at 10 counties each from the top, middle, and bottom of the index in 1964 gives a hint of the wide gaps in living conditions of farmers.

Of the top 10 counties, 7 were in California, 3 in Arizona. Farms in these areas were outstanding for their property values of \$250,000 to \$740,000, and yearly sales ranging from \$50,000 to five times that amount.

Counties where the index was equal to the 1964 national average of 122

showed up from Maine to Washington. Average farm sales for 10 of these counties ranged between \$7,000 and \$11,000, while farm property was valued at \$20,000-\$80,000. The share of farms which reported telephones, freezers, or automobiles was actually slightly higher for each item than in the 10 top-ranking counties.

The contrast is most striking, however, when you place the 10 average counties next to 10 more where the level-of-living index was lowest. In 1964 this group had an average index level of 55, less than half the national figure.

With sales ranging from \$300 to \$4,500, property values in these counties averaged from \$3,700 to \$20,000 per farm.

Automobiles were found on less than half of the farms, compared with the 9 out of 10 farms in average-ranking counties where cars were reported. The gap was smaller for home freezers: three-fourths of the farms in the middle-range counties reported them, versus 43 percent in the lower group. But only about 1 farm in 4 in the lower group had a telephone in 1964, while the average was 85 percent on midlevel farms.

John Zimmer

Elsie Manny

Economic Research Service

Similar Ideas Started British and U.S.

Crop Reports; Both Turned 100 in 1966

As American farmers observed the 100th year of crop and livestock reporting last year, their British counterparts were doing likewise. For in 1866, the annual agricultural census was inaugurated in England and Scotland.

In starting an annual report, the British were catching up with their Irish neighbors. Irish farm censuses had begun in 1847 to survey the extent of the potato famine.

Similarly in 1866, the English farmers knew their own hard times, with a widespread cattle plague (rinderpest) and bad weather which curtailed the harvest. But suspicions as to the damage from these events could not be accurately confirmed. Thus, Parliament authorized a farm census, conducted separately for livestock and crops.

As a result, Englishmen received a first look at the size of their farming enterprise. Early detractors of the "wild and useless scheme" were soon won over to the idea of reliable information available to all.

Supporters first had trouble recruiting an existing government office to do the job. Before 1866, local magistrates, clergymen, and a Scottish agricultural society had participated in smaller surveys. When the government took on the job, gathering agricultural data from farmers became the task of local tax collectors, or excisemen.

Unfortunately, many farmers didn't appreciate this choice. The big land owners in particular objected to having tax officials ask them point blank about the size of holdings, numbers of livestock, and land in crops.

In the century since those early days for Britain's reporting program, farming and the methods of reporting it have progressed on both sides of the Atlantic.

For American fact-gatherers, there was the challenge of keeping pace with new farmsteads. U.S. crop reporting began when our population was equal to that of the British Isles and food and feed grains covered 40 million acres. But by 1966, our foodbasket served a domestic populace over six

times larger, and grain acreage had quadrupled.

In Great Britain, by comparison, farmland long has been established. In the course of 100 annual June 4 crop returns, land in food and feed grains has declined from 11.5 million to 10 million acres. The changes are evident in such items as the cattle herd—which has doubled—and the total population of the Isles, nearly twice that of 1866.

SHOWING U.S. FOODS

Alerting foreign consumers to the availability and quality of American farm products has been one key to our export success. The effort will continue during the coming season on the European trade-fair circuit—another big opportunity for exporters and potential exporters of U.S. food and agricultural products.

On the agenda for the next 3 months are trade fairs in Germany, Ireland, the United Kingdom, France, and Italy, plus London's semiannual Trade Center Show. Products to be exhibited range from freeze-dried mushrooms to Maine lobsters.

Biggest fair this fall is the International Exhibition of Fine Foods and Provisions (ANUGA) at Cologne, Germany. ANUGA will feature the products of thousands of food manufacturers during its 9-day run. Over 100 of these manufacturers will be holding forth in the U.S. exhibit area, along with State and food industry representatives.

Among State exhibits, poultry and poultry parts will be the main offerings of Iowa, Minnesota, and South Carolina. Virginia will emphasize fresh apples, poultry, and processed foods; Michigan, cherries and fresh apples; and Pennsylvania and Illinois, processed foods. Products of Florida, Wisconsin, and New York will also be represented.

Foreign Agricultural Service



SAM STAT SAYS

"Check My Data"

A brief roundup

In This Issue

■ The broiler-type chick hatch in July was 1 percent below a year earlier, according to the Crop Reporting Board. But for January-July, the total was 2 percent above the corresponding 1966 period and the highest on record. The January-July volume: nearly 1.7 billion chicks. ■ The egg-type chick hatch in July totaled 8 percent below a year earlier. Volume for first 7 months of 1967 was off 2 percent from the 1966 pace. ■ The poult hatch, up 4 percent in July, brought the January-July total to 5 percent above the year-earlier level. Number of turkey eggs in incubators August 1 was up 28 percent from the year before. ■ Output of turpentine and rosin in July was 30 percent below a year earlier. ■ Butter in storage August 1 totaled 225 million pounds, more than twice the year-earlier level, but still below average.

	Page
Livestock Prices----	2
1966 Farm Output--	4
Costs and Returns--	6
More Exports-----	8
Trucking Fruit-----	11
Pocketbook Pinch--	12
Better Farm Life----	13

All Articles May Be

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Editor: Ben Blankenship

Newer Ways

To Cope With

Forest Fires

Man-caused fires increased in number last year to the highest point in the past dozen years.

The area burned in National Forests alone rose sharply from the record low of 1965. USDA reports 332,921 acres burned in 1966—compared with only 75,765 in 1965.

Forest Service officials say that the past season was the most severe in recent times. But through

better preparedness and more efficient methods, losses were held well below the 424,000 acres burned in the critical 1960 season.

Since 1960, firefighters have improved their manpower and equipment. Their goal has been speed, and the pathway to this objective has been through the air.

Aerial detection now provides speed in spotting fires before they get too big to handle. One of the most spectacular advances has been the introduction of an infra-red scanner which can detect even small fires at night. It can also cut through smoke to show exactly where fires are burning.

To jump the gun on young fires, training of a shock troop of firefighters has been emphasized. The famed smoke jumpers are among these men. No longer forced to maneuver entirely on the forest floor, firefighters can be transported to a blaze by plane or helicopter. A system of establishing small heliports in the forests has made it possible to reach fires deep in the wilderness.

When a fire gets out of hand, it can spread with tremendous speed. That's when firetroops call on their air support, in flying tankers, to drop fire retardant chemicals.

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